



### LONG-LIFE

(IN TRICKLE CHARGING)

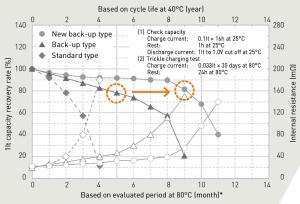
Designed to achieve trickle charging for exchanging with Nickel-Cadmium batteries

**4-6 years**BACK-UP
TYPE

200% →
EXPECTED LIFE
about double

8-12 years NEW BACK-UP TYPE

#### LIFE ESTIMATED BY EVALUATING ACCELERATED LIFE



\* Accelerated evaluation assumes a trickle charging current of 0.033lt at 80°C.

# EXCELLENT CHARGING PERFORMANCE

IN HIGH TEMPERATURE ENVIRONMENT (UP TO 75°C)

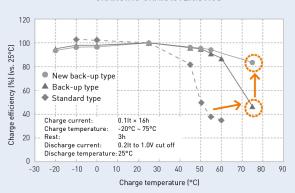
Extended upper temperature limit: 60°C to 75°C

46% BACK-UP TYPE

180% →
CHARGING EFFICIENCY
about 1.8 times

84% NEW BACK-UPTYPE

### CHARGING CHARACTERISTICS





## SUITABLE USE OF BK-1100FHU

Charge   Discharge	Wide temperature range (-30°C to 75°C   -40°C to 85°C)		
Storage	Low self-discharge (eneloop technology)		
Life	10 years durable cell*		
Safety	IEC62133 compliant & no hazard substances		

<sup>\*</sup> Values for expected battery life are reference values only.

The expected life varies depending on the conditions in which the battery is used.

SUITABLE BATTERIES			Panasonic	Panescrá	Parasonic
Specifications			BK-1100FHU	BK-210AH	BK-250SCH
Diameter (mm)		33.0 0/-1.0	17.0 0/-0.7	23.0 0/-1.0	
Height (mm)			91.0 0/-2.5	50.0 0/-2.0	43.0 0/-1.5
Approximate weight (g)			250	25	55
Nominal voltage (V)		1.2	1.2	1.2	
Discharge capacity (mAh)*1  Nominal		Typical*2	12,000	2,050	2,650
		Nominal	11,000	1,900	2,500
Approx. internal impedance at 1,000Hz at charged state ( $m\Omega$ )			5	20	5
		Standard	1,100 x 16	190 x 16	250 x 16
Charge (mA x hrs.)  Low re		Rapid*3	5,500 x 2.4	1,000 x 2.3	1,250 x 2.4
		1	550 x 32	95 x 32	125 x 32
		Low rate	367 x 48	63 x 48	83 x 48
Ambient temperature	Charge (°C)	Standard	-30 to 75	-10 to 60	-10 to 60
		Rapid	-30 to 60	-10 to 60	-10 to 60
		Low rate	-30 to 75	-10 to 45	-10 to 45
	Discharge (°C)		-40 to 85	-10 to 60	-10 to 60
	Storage (°C)	<1 year	-20 to 35	-20 to 35	-20 to 35
		<6 months	-20 to 45	-20 to 45	-20 to 45
		<1 month	-20 to 55	-20 to 55	-20 to 55
		<1 week	-20 to 65	-20 to 65	-20 to 65

<sup>\*1</sup> After charging at 0.11t for 16 hours, discharging at 0.21t. \*2 For reference only. \*3 Needs specially designed control system. Please contact Panasonic for details.

Battery performance and cycle life are strongly affected by how the batteries are used. In order to maximise battery safety, please consult Panasonic when determining charge/discharge specs, warning label contents and design. The data in this document are for descriptive purposes only and are not intended to make or imply any guarantee or warranty.

